DIVISON 10
MATERIALS

SECTION 1000
PORTLAND CEMENT CONCRETE
PRODUCTION AND DELIVERY

1000-4 (I) & (J) PORTLAND CEMENT CONCRETE FOR STRUCTURES AND INCIDENTAL CONSTRUCTION

- Where a concrete mix containing fly ash or slag cement is being used and the Contractor desires higher early strength without resorting to a mix without fly ash or slag cement, he may use, with the permission of the Engineer, a higher class of concrete that contains fly ash or slag cement. For example, Class AA concrete containing fly ash or slag cement may be substituted for Class A or Class B containing fly ash or slag.
- Independent Assurance comparative sampling and testing shall be performed on concrete mixtures placed on FHWA funded projects. Please notify the Section Concrete Technicians when the appropriate amount of material has been placed.

TECHNICIAN'S CHECKLIST
FOR CONCRETE ITEMS

1) Signed concrete mix designs must be submitted to the Resident Engineer 30 days prior to use. The contractor should use Form 312R if the mix designs are already in the HiCAMS database or 312U if they are not in the database. Submit the forms to the Physical Testing Engineer.
2) Check to see if concrete is coming from a certified batch plant. Certified batch plants are listed in HiCAMS. (This applies to concrete pavement plants also.)
3) Check project special provisions for any unique requirements.
4) Anyone testing concrete for acceptance purposes must have a current NCDOT Concrete Field Technician certification. Personnel with an expired certification can not accept concrete.
5) In cold weather, ensure that the contractor uses appropriate cold weather mix designs and has sufficient approved insulation blankets on hand.
6) Check the most recent Concrete Field Technician Study Guide for updated test procedures and frequencies.

SECTION 1005
GENERAL REQUIREMENTS FOR AGGREGATES

Independent Assurance comparative sampling and testing shall be performed by M&T personnel on aggregates used on FHWA funded projects as bases, stabilizers, and in the production of concrete mixes. No Independent Assurance sampling and testing is performed on aggregates used in the production of asphalt mixes at the quarry or plant.

SECTION 1008
AGGREGATE FOR STABILIZATION

1008-1 AGGREGATE STABILIZATION

Sampling

- Sampling shall be performed by a certified ABC Sampling Technician.
- Sample aggregate in accordance with the procedures outlined in the ABC Sampling Manual.
- Sampling lot will be 2,500 tons or fraction thereof.
- For each lot of aggregate, one sample shall be taken at a random location from the roadway. A minimum of three samples should be taken per project and no more than five days of placement shall occur without a sample.
- Each sample shall weigh a minimum of 70 lbs. This will require two full sample bags for each sample).
- Samples shall be taken from the spreader box using a steel sampling ring issued by M&T.
- Samples shall be submitted to the Central Laboratory or a Regional Laboratory for testing as soon as possible after the sample is obtained. Allow at least 72 hours for testing.
- The sample taken shall be designated by the prefix "RA" (Roadway Assurance), the lot number. The sample number will be shown on the sample card and test report.
- The total tonnage of the lot shall be indicated on each sample card.
- The abbreviation "SA" may be used on sample cards, test reports, etc. to indicate that the material is Stabilizer Aggregate.

Density

- Contact the M&T Soils Lab or use the M&T website to obtain the unit weight of the material being placed.
- Density testing shall be performed by a certified Conventional Density Technician.
- Density testing shall be performed in accordance with the procedures outlined in the most current version of the Conventional Density Testing Manual.
- Density testing frequency: 28 ft. in width or less, one test per **1,000 linear ft.** prepared; over 28 ft. in width one test per **3,000 square yards** prepared.
- Independent Assurance comparative sampling and testing shall be performed by M&T personnel on aggregates used for stabilization on FHWA funded projects.

SECTION 1010
AGGREGATE FOR NON-ASPHALT TYPE BASES

Independent Assurance comparative sampling and testing shall be performed by M&T personnel on aggregates used as bases on FHWA funded projects.

1010-1 AGGREGATE BASE COURSE

Sampling

- Sampling shall be performed by a certified ABC Sampling Technician.
- Sample aggregate in accordance with the procedures outlined in the ABC Sampling Manual.
- Sampling lot will be 2,500 tons or fraction thereof.
- For each lot of aggregate, a minimum of one sample shall be taken from the roadway (behind the spreader) at a random location prior to compaction.
- A minimum of three samples should be taken per project and no more than five days of placement shall occur without a sample.
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- Each sample shall be a minimum of 70 lbs. This will require two full sample bags for each sample.
- No RA samples are required if a project utilizes less than 1000 total tons of ABC. The samples taken from a lot shall be designated by the prefix "RA" (Roadway Assurance), and the lot number. The sample number will be shown on the sample card and test report. The station where the sample is taken on the roadway shall also be shown on the sample card.
- The total tonnage of the lot shall be indicated on each sample card.
- The abbreviation "ABC" may be used on sample cards, test reports, etc., to indicate Aggregate Base Course.
- No sample shall be taken within two feet of the edge of a spread. Note: Even if random number generation indicates a sampling location in or near the seam between spreader runs, it is acceptable to choose another nearby location outside of the two feet minimum.
- Check samples may be taken on rejected material only with approval from the Central Laboratory. Check samples shall be taken by representatives of the Materials and Tests Unit. The Roadway Construction Engineer will be notified prior to taking the sample. The method of correcting the lot shall be approved both by the Roadway Construction Engineer and the Soils Engineer.
- Samples shall be submitted to the Central Laboratory or a Regional Laboratory for testing as soon as possible after the sample is obtained. Allow at least 72 hours for testing.

Density

- Material should contain approximately optimum moisture as determined by the Resident Engineer or Technician at the time of compaction.
- Contact the M&T Soils Lab or use the M&T website to obtain the unit weight of the material being placed.
- Density testing shall be performed by a certified Density Technician.
- If utilizing nuclear density control, testing shall be performed by a certified Nuclear Density Technician.
- Conventional density testing shall be performed in accordance with the procedures outlined in the most current version of the Conventional Density Testing Manual.

- Nuclear density testing shall be in accordance with the procedures outlined in the most current version of the Nuclear Gauge Operator's Manual.
- Density: 28 ft. in width or less, one test per **1,000 linear ft.** prepared; over 28 ft. in width, one test per **3,000 square yards** prepared.
- Independent Assurance comparative sampling and testing shall be performed by M&T personnel on ABC on FHWA funded projects.

1010-2 AGGREGATE FOR PLANT MIXED CEMENT TREATED BASE COURSE

Sampling

- The Aggregate Producer shall submit a proposed ABC Gradation to the Resident Engineer four weeks prior to placement of CTBC on the roadway.
- The Resident Engineer shall immediately forward the proposed ABC Gradation to the Soils Engineer.
- The Resident Engineer shall submit a minimum of eight bags of ABC from the quarry (assistance can be provided by the local M&T Technician) to be used for CTBC to M&T. The samples are to be tested for unit weight and unconfined compression tests. Samples should be submitted at least 3 weeks prior to placement of CTBC on the roadway.
- Acceptance sampling lots will be 2,500 tons or fraction thereof.
- Sampling shall be performed by a certified ABC Sampling Technician.
- Sample aggregate in accordance with the procedures outlined in the ABC Sampling Manual.
- For each lot of CTBC produced, a sample shall be taken at random intervals prior to cement being added.

- Each sample shall be a minimum of 70 lbs. This will require two full sample bags for each sample.
- The sample taken from a lot shall be designated by the prefix "RA" (Roadway Assurance), and the lot number. The sample number will be shown on the sample card and test report. If the sample is taken from the roadway, the station where the sample is taken shall also be shown on the sample card.
- The abbreviation "CTBC" may be used on sample cards, test reports, etc. to indicate Cement Treated Base Course.
- If the CTBC is plant-mixed, the Roadway Assurance sample shall be taken from the conveyor belt prior to cement being added.
- For road-mixed CTBC, the Roadway Assurance sample shall be taken from the roadway after the material has been placed. Samples shall be submitted to the Central Laboratory or a Regional Laboratory for testing as soon as possible after the sample is obtained. Allow at least 72 hours for testing.

Density

- Contact the M&T Soils Lab or use the M&T website to obtain the unit weight of the material being placed.
- Density testing shall be performed by a Technician certified in Conventional Density and Nuclear Density.

- Density testing shall be performed in accordance with the procedures outlined in most current version of the Conventional Density Testing Manual and the Nuclear Gauge Operator's Manual.

SECTION 1012
AGGREGATE FOR ASPHALT PAVEMENTS AND SURFACE TREATMENTS

- Coarse and fine aggregates must come from quarries that are participating in the aggregate QC/QA Program. These quarries are on the NCDOT Comprehensive Approved Products List available at https://apps.dot.state.nc.us/vendor/approvedproducts/Producer.aspx. From this website you can search using the Producer/Supplier name, Facility Type, or Plant ID.
- For fine aggregates not on the list contact the Asphalt Design Engineer at (919) 329-4060.
- Do not use fine aggregate containing sticks, roots, trash, visible lumps of clay, or other unsatisfactory material unless all undesirable material is removed to the satisfaction of the Engineer before the aggregate is used in the asphalt mixture.
- Approved mineral filler sources are on the NCDOT Comprehensive Approved Products List. If filler material can not be found on the list, contact the Asphalt Design Engineer at (919) 329-4060 for assistance.
- Use reclaimed asphalt shingles (RAS) and reclaimed asphalt pavement (RAP) that meet all requirements specified for the classifications as defined in Subarticles 1012-1(E) and 1012-1(F) respectively.
- After a stockpile of RAS or RAP has been sampled and mix designs made from these samples, any new sources of RAS or RAP must be field tested to ensure gradation and binder uniformity. These tests must meet the requirements of Tables 1012-2 and 1012-4 respectively.

SECTION 1014
AGGREGATE FOR PORTLAND CEMENT CONCRETE

- Coarse and fine aggregates must come from quarries that are participating on the aggregate QC/QA Program listed on the NCDOT Comprehensive Approved Products List. List available at https://apps.dot.state.nc.us/vendor/approvedproducts/Producer.aspx. From this website you can search using the Producer/Supplier name, Facility Type, or Plant ID.
- Independent Assurance sampling and testing shall be performed by M&T personnel on aggregates used for concrete mixtures on FHWA funded projects.

SECTION 1016
SELECT MATERIALS

It is the responsibility of the Resident Engineer to indicate which class the select material is to be tested for on the sample card and on HiCAMS sample details.

SECTION 1018
BORROW MATERIAL

- Sampling shall be conducted by a Technician certified in Borrow Pit Sampling
- Samples shall be taken in accordance with the Borrow Pit Sampling Manual
- Each sample shall weigh between 5 to 8 lbs.
- Only natural earth materials may be used as borrow material.
- Samples shall be obtained by the use of hand auger or power flight auger. Other equipment such as a dragline or backhoe may be used if approved by the Engineer.
- A minimum of 2 test borings per acre will be required. The minimum number shall be increased if determined necessary in order to obtain representative samples of the entire source.
- Each test boring shall be identified by a stake driven adjacent to the test boring hole. The test boring number shall be shown on the stake.
- Samples will be acquired from each significantly different layer of soil from each test boring. Combining materials from different layers into a composite sample will not be permitted.
- Each test boring shall be designated numerically (1, 2, 3, etc.) in the order of drilling.
- The first sample from a test boring shall be identified by the test boring number. Any additional samples from a test boring shall be identified by the test boring number plus an alphabetical letter (1, 1A, 1B, etc.). These additional samples shall be designated alphabetically in order from the surface down.
- A boring log shall be kept for each test boring and will show the following:
  1. test boring number
  2. visual description of the material encountered
  3. elevation or depth below surface of layers of material encountered
  4. location of samples obtained
  5. location of water table
  6. total depth of boring

- For each source, a site map shall be prepared showing the following:
  1. The location of the source in relation to natural landmarks, property lines and/or existing public roads in the area.
  2. A plan view of the property and all test borings with identifying numbers shown.
- Samples shall be submitted to the Central or Regional laboratory of the M&T Unit
- Resident Engineers shall specify on the sample card which criteria (coastal plain or statewide criteria) the borrow sample is to be tested for.

SECTION 1020
ASPHALT MATERIALS

- Asphalt materials are accepted by a signed supplier's certification and a separate signed statement of certification from the transporter.
- Asphalt delivery tickets should be checked for compliance to Article 1020-1.
- All delivery tickets, including the ones for emulsified materials, should be forwarded to the Division QA Supervisor.
- Should a verification test identify any unacceptable asphalt materials, the Chemical Testing Engineer shall notify the QA Supervisor of the failure.
- The Division QA Supervisor will determine if the unacceptable asphalt materials have been used in his area and advise the appropriate Resident Engineer.
- The Resident Engineer will investigate the quality of the pavement where the material was used and determine its acceptability.
- The QA Supervisor will notify the Chemical Testing Engineer of any projects where the material was used or that no failing material was identified in their area.
- Any suspect asphalt material may be sampled at any time. Emulsified asphalt samples must be taken in a clean wide mouth ½ gallon plastic or glass container; asphalt binder must be taken in a quart metal container. Tape all lids closed, label container, and include delivery ticket (bill of lading).
- Contact the Asphalt Design Engineer for assistance.
- Monthly verification samples must be taken by the plant personnel under the direction of M&T's Independent Assurance personnel as a check of the transportation and storage facilities.
- A list of materials approved for use in prime coat applications is maintained by M&T. See the Approved Products Listing or contact the Materials Operations Engineer at 919-329-4200 for a copy of the list.

SECTION 1026
CURING AGENTS FOR CONCRETE

1026-2 LIQUID MEMBRANE CURING COMPOUNDS

- For structural concrete, see comments for Subarticle 420-15(C).
- For paving concrete, see comments for Subarticle 700-9(B).

SECTION 1032
CULVERT PIPE

1032-1 CORRUGATED METAL CULVERT PIPE

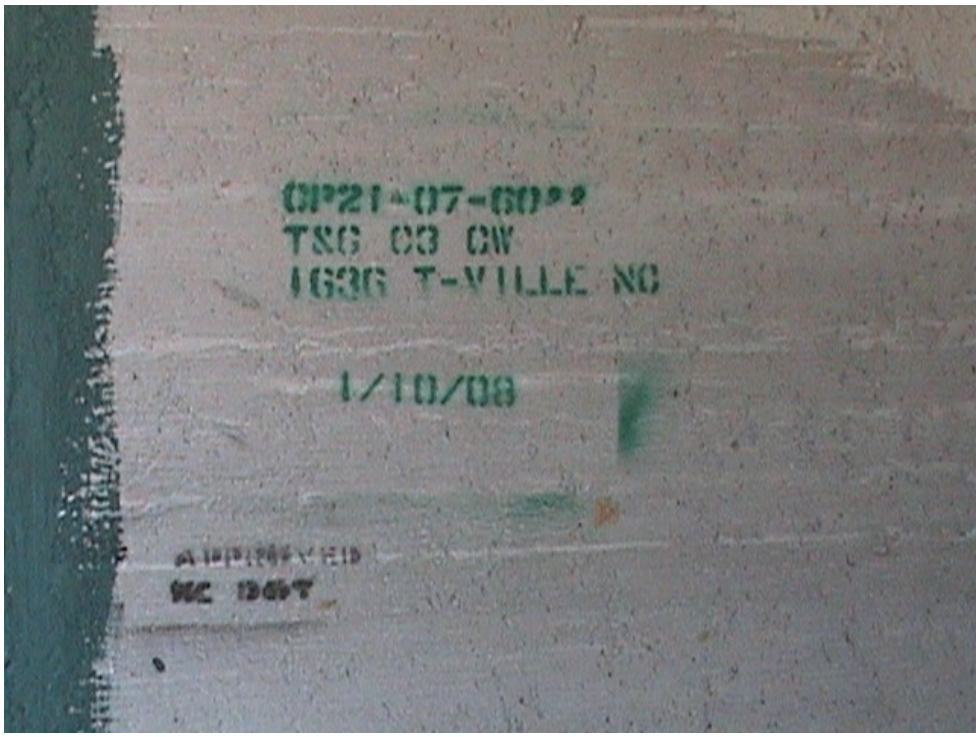
- All metal pipe materials must be produced in accordance with the NCDOT Brand Registration Program for Corrugated Metal Pipe Materials.
- Producers of metal pipe materials must be on the Comprehensive Approved Products/Producer List.
- 25 % of all pipe shipped to a project must have the producer's QC stickers on it. If there are no stickers on the pipe, notify your local Section Materials Specialist.
- Each QC sticker will bear the name of the producer and the plant location where the pipe was manufactured.

Example of typical QC sticker

- Upon delivery of metal pipe materials, but prior to installation, notify your local Section Materials for inspection of gage thickness and zinc coating.
- A Materials Receipt Report (MRR) should be completed indicating the producer, plant location, size and type of pipe.
- The Bill of Lading should be attached to the MRR and filed at the Resident Engineer's office.
- After inspection, a test report will be entered on the HiCAMS system where it will be available for printout.

1032-6 CONCRETE CULVERT PIPE

- All concrete culvert pipe is pre-tested at the producers' facilities.
- Once tested and accepted, each piece of pipe is stamped approved.
- The class and type of pipe is also indicated on each piece of pipe.

- 

Example of a typical concrete pipe stamp
CP = Concrete Pipe Plant #21
60" pipe
Manufactured on 1/10/08 in Thomasville
The rectangular stamp in the bottom left corner is the "Approved NCDOT" stamp.

- Once pipe is delivered, project personnel will check the inside of the pipe for the approval stamp.
- Project personnel will visually inspect the pipe for any damage which may have occurred during shipment. Pipe which has been damaged during shipment should not be used, even if it is stamped approved.
- A MRR for the pipe will be completed indicating the name of the producer, size, type and date of manufacture.
- The Bill of Lading should be attached to the MRR and filed at the Resident Engineer's office.
- A test report will be entered on the HiCAMS system where it will be available for printout.

SECTION 1034
SANITARY SEWER PIPE AND FITTINGS

- Concrete sewer pipe will be pre-inspected by M&T and stamped "NCDOT Approved." See Section 1032.
- All other types of sewer pipe are accepted based on catalog cuts.
- It is the Resident Engineer's responsibility to check the materials against the catalog cuts and/or certifications at the time they are received.
- In addition, a Type 3 certification must accompany all ductile iron pipe shipments when they are received.

SECTION 1036
WATER PIPE AND FITTINGS

- All materials in this section are accepted based on catalog cuts.
- It is the Resident Engineer's responsibility to check the materials against the catalog cuts and/or certifications at the time they are received.
- In addition, a Type 3 certification must accompany all ductile iron pipe shipments when they are received.

SECTION 1040
MASONRY

- All concrete building block and brick will be produced under the Solid Concrete Masonry Brick/Unit QC/QA program.
- Concrete Masonry producers must be on the Comprehensive Approved Products List.
- The producer will conduct quality control testing during production. M&T will conduct quality assurance testing after fabrication.
- Each cube or pallet should have a Producer's QC Sticker affixed to it.

Example of typical QC sticker

- Project personnel will be able to identify approved concrete brick and block visually. All approved brick and block will be red or have a reddish tint.
- Each Resident Engineer will be provided with a sample brick to aid in identification.
- If material arrives on the project that is in question, please contact your local Section Materials Specialist.
- A MRR for the concrete brick or block should be completed indicating the name of the producer, size, and type.
- The Bill of Lading should be attached to the MRR and filed at the Resident Engineer's office.
- A test report will be entered on the HiCAMS system where it will be available for printout.
- Independent Assurance sampling and testing shall be performed by M&T personnel on brick, block, and masonry cement used on FHWA funded projects.

SECTION 1042
RIP RAP MATERIALS

- All rip rap materials should be visually inspected upon shipment to the project by Department personnel to ensure that it conforms to contract requirements. This visual inspection should occur prior to placement.
- If assistance is needed, contact your local Section Materials Specialist.

SECTION 1044
SUBSURFACE DRAINAGE MATERIALS

- Fine and coarse aggregate shall come from a producer on the Comprehensive Approved Products/Producer List.
- All pipe materials shall come from a producer on the Comprehensive Approved Products/Producer List, except for PVC pipe, which is accepted by a Type 3 certification.

SECTION 1046
GUARDRAIL MATERIALS

- All guardrail materials must be produced in accordance with the NCDOT Brand Registration Program for Guardrail Materials.
- All guardrail producers must be on the Comprehensive Approved Products/Producer List.
- It is no longer a requirement for the producer to supply mill tests reports with each shipment of material.
- All bundled materials will have QC stickers on the outside of the bundle.

Typical QC sticker for guardrail materials.

- Guardrail materials are inspected **after** they are installed.
- Project personnel should visually inspect wood products for the AWW stamp prior to installation. If not stamped, please notify your local Section Materials Specialist.
- Project personnel should notify their local M&T Technician for inspection. If possible, project personnel should, at the time of notification, give the Technician the linear foot amount of guardrail to be inspected. This could come from the pay record book or diary.
- The inspection frequency can be any of the below:
    1. Once 2,000 linear feet has been installed.
    2. Once an installation for that particular location has been completed.
    3. For multiple locations, each time the installer has finished a section and has pulled off the project.
    4. Any time when the project personnel deems it necessary, due to traffic control considerations.
    5. Any time when in the opinion of project personnel there may be problems with the material or in the manner it was installed.
- M&T personnel will randomly inspect each installation and will input a test report in HiCAMS.
- A MRR for the guardrail material should be completed indicating the name of the producer, plant location, sizes, and types of all items associated with the guardrail.
- The Bill of Lading should be attached to the MRR and filed at the Resident Engineer's office.
- Price reductions for guardrail materials are done based on recommendations from the Resident Engineer and the Materials Operations Engineer.

SECTION 1050
FENCE MATERIALS

- If fence materials are not pre-tested and M&T tagged, contact your local Section Materials Specialist for sampling.
- Project personnel should visually inspect wood posts and braces for the AWW stamp prior to installation. If not stamped, please notify your local Section Materials Specialist.

SECTION 1054
DRAINS

- Corrugated metal pipe use in deck drains, funnel and funnel drains must be produced under the Departments' Brand Registration Program. See Section 1032 for details.
- Deck drains are pretested by M&T and thereafter accepted on the job with respect to manufacturer or supplier and lot number. The Technician should record the manufacturer or supplier and lot number on his Materials Received Report.

SECTION 1056
GEOSYNTHETICS

- Although the material is accepted on certifications, project personnel should notify their local Section Materials Specialist if they feel the material is not performing accordingly. At which time samples of the material may be tested.
- Care should be taken to ensure that the fabric is stored properly and not exposed to direct sunlight for more than 7 days before installation for all uses except erosion control devices and mechanically stabilized earth (MSE) wall faces.
- If questions arise concerning the acceptability of the material, please contact the Materials Operations Engineer.

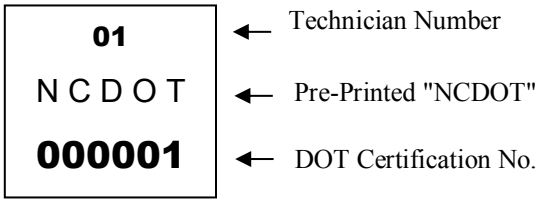
SECTION 1060
LANDSCAPE DEVELOPMENT MATERIALS

1060-3 LIMESTONE

Limestone for agricultural use is acceptable if it is listed on the approved list maintained by the Roadside Environmental Unit.

1060-4 SEED

- All seed materials are pre-tested and approved for use.
- Approved seed will have an orange NCDOT Approved sticker affixed to it.



Typical Sticker for Approved Seed Materials

- The seed database is located on the M&T web page. The web address for this page is: https://apps.dot.state.nc.us/vendor/approvedproducts/Seed.aspx
- Project personnel will ensure that the seed is still acceptable by verifying the germination period. This can be done by inputting the two-digit Technician's number followed by a dash and then the six-digit DOT certification number (Example: 01-000001).

SECTION 1070
REINFORCING STEEL

- All steel must be melted and manufactured in the United States except for minimal amounts allowed by Subarticle 106-1(B) of the Standard Specs.
- All black (uncoated) rebar shipments must be accompanied by a mill test report.
- Ensure the correct grade of rebar is supplied. All rebar except for concrete pavement tie bars must be Grade 60 (420) – Tie bars are Grade 40 (300).
- In addition, black rebar is accepted one of the following two ways:
    1. The shipment of rebar will have an M&T Form 913 with it. The weight of rebar covered by this document must be at least the amount received in the shipment. No acceptance sample is required.
    2. If no M&T Form 913 is supplied, an acceptance sample must be taken. Rebar samples must be at least 30" long and include 2 separate bars of each size in the shipment. The sample number should be indicated on the MRR.
- Epoxy coated rebar is accepted under a quality control/quality assurance program. Each shipment will have an M&T Form ER-02, "Epoxy Coated Reinforcing Steel Shipping Report" with it when it arrives on the job. (Mill certifications and Form 913 are not required on coated rebar. They are already on file with M&T). Record bar sizes, weights, and the M&T Release Number on Material Received Reports. The M&T Release Number is located near the bottom of form ER-02. Use the Release Number as an alternate ID on HiCAMS.
- The Resident Engineer should keep all paper work on file for audit purposes.
- For specialty products that are epoxy coated like spiral reinforcing steel, dowels, and rebar supports, shipments will have an M&T Form 310, M&T Form 913, and Certified Mill Test Reports.

- In addition to the above, Independent Assurance samples are required on all federal aid projects in accordance with the plan notes. Samples will be taken by the local Materials and Tests Unit Concrete Technician.
- Always receive rebar by weight.
- A sample of each size of rebar support in each shipment is required.

SECTION 1072
STRUCTURAL STEEL

- All steel must be melted and manufactured in the United States except for minimal amounts allowed by Subarticle 106-1(B) of the Standard Specifications.
- Structural steel is pre-inspected and stamped by M&T or their contract inspection agency. Structural steel should not be accepted unless it has been approved by M&T.
- Indicate the structure number, main member number, and producer of each shipment on the MRR. Inspection reports and mill certifications are on file with M&T. Field Inspection Reports are available in HiCAMs. It is not necessary to send any paperwork to M&T.
- Materials Payment Authorization forms, signed by an M&T inspector, are provided to the fabricator when the plate steel or finished beams are approved. If this form is included with the material payment request from the contractor, no further verification is required. If there is no form, contact M&T.
- All fasteners (nuts, bolts, washers, etc.) must be of domestic origin. There is **NO** allowance for minimal amounts of foreign material for fasteners.
- High strength bolts must be tested before use. If the containers are not stamped "NC DOT Approved" call the Structural Members Engineer for sampling. Inspection reports for high strength bolts are included on the Field Inspection for the structural steel. Use the rotational capacity lot number as the alternate ID in HiCAMs.
- If field welding is required, contact the Structural Members Engineer if any questions arise.
- All field welding must be performed by an approved welding operator.
- All field welding must be performed with approved electrodes.
- A list of both approved welding operators and approved electrodes is on the Comprehensive Approved Products List in HiCAMs or on the Materials & Tests Unit web page.
- All field welding must be performed in accordance with an M&T approved welding procedure. Standard approved procedures for most welding applications can be found on the M&T website (https://connect.ncdot.gov/resources/Materials/Pages/default.aspx.) If the weld is not covered by a standard procedure or the welder desires to use a different procedure, the contractor or welder must submit the proposed procedure to M&T for approval prior to performing the weld.

SECTION 1074
MISCELLANEOUS METALS AND HARDWARE

- Metal bridge railing is pre-inspected by M&T. Test reports will be on file with the Materials and Tests Unit.
- Project personnel should notify their local M&T Technician for inspection of Metal Stay-In-Place Forms prior to use.

- **Iron castings** are accepted under a quality control/quality assurance program. They will be stamped with the foundry's approved QC/QA stamp. Alternate ID's for Iron Castings are entered into HiCAMs as follows:

  Castings will have either "Made in USA" or "USA" cast in them. In addition, they will have a date cast in them. This date, along with the foundry ID number is the alternate ID to be entered into HiCAMs. The alternate ID type will be **"Lot Number"** and should be entered in the following format:

CIX-MMDDYYYY

Where: **CIX** is the ID of the foundry that cast the iron – (Note: This may not be the supplier.)

MM is the month cast into the casting

DD is the day of the month cast into the casting

YYYY is the year cast into the casting – (Note: Only two digits may be on the casting but HiCAMs requires the four-digit year format.

Foundry ID's are as follows:

CI2 US Foundry - (Miami, FL)
CI3 East Jordan Ironworks, Inc. (Baton Rouge, LA)
CI5 East Jordan Ironworks, Inc. (East Jordan, MI)
CI10 East Jordan Ironworks, Inc. (Ardmore, OK)

Please note that foreign castings are no longer inspected by M&T and therefore are not acceptable for use on NC DOT projects.

SECTION 1076
GALVANIZING

- Allow the Engineer to take samples of molten zinc directly from galvanizing vat upon request.
- Repair of damaged galvanizing must be done with 2 coats of zinc repair paint meeting the requirements of Article 1080-9. The first coat must be dry to the touch before the second coat is applied. Organic zinc repair paint needs to be continually agitated.
- There is **NO** zinc rich paint available in aerosol spray cans that meet these specifications.

SECTION 1077
PRECAST CONCRETE UNITS

- Precast drainage structures meeting the requirements of the NCDOT Roadway Standard Drawings are allowed to be produced as a stock item. This will allow the contractor to install these items without submitting drawings for approval. All other precast items still must be handled through the plan submittal process.

- All items will still be pre-tested and stamped "NCDOT Approved" before shipment to the project.

Typical Stamp for Approved Precast Materials

- When materials arrive on the project the project personnel will verify that the items are produced from an approved producer, that the items have been stamped "NCDOT APPROVED", and will visually inspect the items for damage which may have occurred during shipment and transportation to the project.
- Any items that are in question should not be used. Please contact your local Section Materials Specialist for assistance.
- A list of approved producers can be found on the Department's Comprehensive Approved Products List.
- A MRR should be completed. Please ensure that all information such as size, piece numbers, and the name of the manufacturer are listed on the MRR.
- A test report will be entered on the HiCAMS system where it will be available for printout.
- Strength requirements for pre-cast items are detailed in Table 1077-1.

SECTION 1078
PRESTRESSED CONCRETE MEMBERS

- All prestressed concrete members are pre-inspected on an individual project basis by M&T and stamped "NCDOT Approved."
- Indicate the member type, girder or piece number, length, producer, date of casting, and station number of each prestressed concrete member on the MRR
- The Resident Engineer will be sent a Materials Payment Authorization form when the members are approved if they are not immediately shipped to the project.
- Field Inspection Reports will be available in HiCAMs when the members are approved by M&T.

SECTION 1080
PAINT AND PAINT MATERIALS

- All paint is tested before use unless the quantity meets the small quantity exclusion. Most paint is pre-tested.
- All paints except multi-component products are to be delivered to the project completely mixed and ready for use without additional oil or thinner.
- All paints and solvents for shop and field application must be from the same manufacturer. See Article 442-8 of the specifications.
- Do not use paint from a container that has been previously opened.
- Get the batch number and expiration date off each container.
- Strictly follow the weather limitations set forth in Subarticle 442-9(B) of the specifications.

SECTION 1082
STRUCTURAL TIMBER AND LUMBER

- All timber or lumber must be pre-inspected by an M&T approved independent inspection agency. The inspection firm will hammer mark, die stamp or tag each piece of acceptable timber or lumber with their unique mark. Silver "M&T" numbered tags are no longer used.
- An industry standard commercial inspection report must accompany each shipment of timber or lumber. M&T no longer has inspection reports on file.
- In addition, an industry standard treatment test report for treated lumber must accompany each shipment of treated timber or lumber. M&T no longer has test reports on file.
- These inspection reports may be on the same sheet of paper.
- Report the size, quantity, inspection report number and the wood producer on the MRR. Forward this information to M&T along with the supplied inspection reports.

SECTION 1084
PILES

- See Section 1082 for timber piles.
- See Section 1078 for prestressed piles.
- Plain steel piles are accepted by certified mill test report by the Resident Engineer. The Resident Engineer must keep these on file for audit purposes. All steel must be melted and manufactured in the United States except for minimal amounts allowed by Sub-Article 106-1(B) of the Standard Specs.
- It is the Resident Engineer's responsibility to check the heat numbers on the piles against those on the certified mill test reports.
- Report the size, length, heat number and supplier on the MRR for plain piles.
- Coated steel piles are pre-inspected by M&T and will be stamped "NCDOT Approved."
- Report the size, length, station number, and supplier of coated piles on the MRR. Mill certifications and inspection reports are all ready on file at M&T. Field Inspection Reports are available in HiCAMs.

SECTION 1086
PAVEMENT MARKERS

Traffic Engineering maintains a list of approved pavement markers and adhesives.
Link: https://connect.ncdot.gov/resources/safety/Pages/Signing-and-Delineation.aspx

SECTION 1087
PAVEMENT MARKINGS

Traffic Engineering maintains a list of approved pavement marking components.
Link: https://connect.ncdot.gov/resources/safety/Pages/Signing-and-Delineation.aspx

SECTION 1088
DELINEATORS

Traffic Engineering maintains a list of approved prismatic plastic delineators.
Link: https://connect.ncdot.gov/resources/safety/Pages/Signing-and-Delineation.aspx

SECTION 1092
SIGNING MATERIALS

- For help or questions on signs and signing materials, contact the Signing & Delineation Unit.
- Larger signs (Type A and B) will be pre-inspected by M&T. In addition, all signs must be inspected after erection. M&T should be contacted for this inspection.

SECTION 1094
GROUND MOUNTED SIGNS

- All steel must be melted and manufactured in the United States except for minimal amounts allowed by Subarticle 106-1(B) of the Standard Specs.
- Mill certifications are required for all U-channel sign posts.
- The thickness of the galvanizing on U-channel posts must be checked by M&T.
- Break-away and simple sign supports are pre-inspected by M&T.

SECTION 1096
OVERHEAD SIGN STRUCTURES

- All overhead sign assemblies are pre-inspected by M&T.
- All steel must be melted and manufactured in the United States except for minimal amounts allowed by Subarticle 106-1(B) of the Standard Specs.

CONTACT LIST FOR DIVISION 10

SECTION	CONTACT	PHONE NUMBER
1000	Physical Testing Engineer	(919) 329-4120
1005	Physical Testing Engineer	(919) 329-4120
1006	Quality Assurance Engineer	(919) 715-1746
1008	Soils Engineer	(919) 329-4150
1010	Soils Engineer	(919) 329-4150
1012	Asphalt Design Engineer	(919) 329-4060
1014	Physical Testing Engineer	(919) 329-4120
1016	Soils Engineer	(919) 329-4150
1018	Soils Engineer	(919) 329-4150
1020	Chemical Testing Engineer	(919) 329-4090
1024	Physical Testing Engineer	(919) 329-4120
1026	Physical Testing Engineer	(919) 329-4120
1028	Physical Testing Engineer	(919) 329-4120
1032	Materials Operations Engineer	(919) 329-4200
1034	Structural Members Engineer	(919) 329-4200
1036	Structural Members Engineer	(919) 329-4200
1040	Materials Operations Engineer	(919) 329-4200
1042	Materials Operations Engineer	(919) 329-4200
1044	Materials Operations Engineer	(919) 329-4200
1046	Materials Operations Engineer	(919) 329-4200
1050	Chemical Testing Engineer	(919) 329-4090
1052	Chemical Testing Engineer	(919) 329-4090
1054	Materials Operations Engineer	(919) 329-4200
1056	Materials Operations Engineer	(919) 329-4200
1060	Materials Operations Engineer	(919) 329-4200
1070	Structural Members Engineer	(919) 329-4200
1072	Structural Members Engineer	(919) 329-4200
1074	Structural Members Engineer	(919) 329-4200
1076	Chemical Testing Engineer	(919) 329-4090
1077	Materials Operations Engineer	(919) 329-4200
1078	Structural Members Engineer	(919) 329-4200
1080	Chemical Testing Engineer	(919) 329-4090
1081	Physical Testing Engineer	(919) 329-4120
1082	Structural Members Engineer	(919) 329-4200
1084	Structural Members Engineer	(919) 329-4200
1086	Structural Members Engineer	(919) 329-4200
1087	Chemical Testing Engineer	(919) 329-4090
1088	Structural Members Engineer	(919) 329-4200
1089	Structural Members Engineer	(919) 329-4200
1090	Materials Operations Engineer	(919) 329-4200
1092	Structural Members Engineer	(919) 329-4200
1093	Structural Members Engineer	(919) 329-4200
1094	Structural Members Engineer	(919) 329-4200
1096	Structural Members Engineer	(919) 329-4200
1097	Structural Members Engineer	(919) 329-2400

STOCKROOM PROCEDURES

- The Materials and Tests Unit (M&T) Stockroom's role is to provide equipment and supplies necessary to perform sampling, testing and inspection of materials. Other supplies should be requisitioned directly from the Equipment Unit.
- There are two requisition forms used in the Stockroom: M&T Form 100, which is used for most supplies and M&T Form 101 which is used for conventional density equipment. To expedite delivery of supplies, the information at the top of the forms should be filled out completely, the appropriate Courier Number should be added to that information, and the Resident Engineer should sign in the "Approved" box indicating approval of the requisition.
- The requisition form should be submitted in duplicate so a copy indicating it has been filled may be returned to the Resident Engineer.
- If the entire order cannot be filled because of limited inventory, the remaining amount will be placed on back order and shipped as soon as possible. It is requested that these same items not be automatically reordered.
- The space in the Stockroom is limited and therefore large quantities of supplies may not be available. It is requested that orders be limited to relatively small quantities or, if large quantities are desired, several items such as sample bags, CRC and plastic ties may be ordered directly from the Equipment Unit.
- If personnel are being sent to pick up supplies, the Stockroom can provide better service if the requisition has been received in advance with an indication as to when the planned pick up is scheduled. When requesting a complete set of density equipment, please provide 48-hours notice.
- Electronic scales that are part of the conventional density equipment should never be transported in the cargo area of trucks. These items should always be transported in the passenger section of the vehicle to prevent damage and/or theft.
- Electronic scale batteries must be charged at least on a weekly basis regardless of whether they have been used that week or not. This includes the winter when there is minimal use of these scales. The batteries do not come back to full strength if this pattern is not maintained.

FORM M&T-100 REQUISITIONS OF SUPPLIES

M&T-100

Must be submitted in duplicate (2)

North Carolina Division of Highways
MATERIALS AND TESTS UNIT

REQUISITION FOR SUPPLIES

Order highlighted items from Inventory Control (this does not apply to M&T)

DATE ORDERED

NAME: DIVISION #

ADDRESS: STREET CITY ZIP CODE

COURIER #: MSC # TELEPHONE #: FAX #:

	QUANTITY ORDERED	QUANTITY SHIPPED				QUANTITY ORDERED	QUANTITY SHIPPED		
1			AE-55	Boxes	51			Form MT-606	Btmus Plant Insp. Daily
2			AE-55	Chase Indicator	52			Form MT-606A	Graph Report Mix Extraction
3			AE-55	Spong Mold	53			Form MT-609A	Wk Sht Conc. Base Course
3a			AE-55	Small Bottle Brush	53a				
3b			AE-55	Complete Kit	53b				
4					54			Form MT-610	Hot Asp. Mix Marshal Meth
5					55			Form MT-702	Conc. Tech. Report
6			Bag Plastic	Cylinder Mold	56			Form MT-703	Conc. Plant Calib. Test
7			Bag Plastic-Zip 1 Gal	121000035	57			Form MT-901	Project Report
8					58			Form MT-903	Conc. Batch Ticket
9					59			Form MT-904	Report Disp. of Reject Mat.
10			Brush Bottle	Large	60			Form MT-924	Property Record Mast Fil
11			Brush Bottle	Small	61			Form 8-83-1	Aggregate Gravity Test
12			Brush Hair	Round	62			Hicams Sample Card	
13			Brush Wire	(Mold) Brass	63			Hicams-Sample Card	121000025 Plastic Envelope
14			Brush Flat Wire	130008650	64				
15			Brush Wire Floor Lg	133000200	65				
16					66			Electric Hot Plate	
17					67			Jar 1/2 Gal.	Plastic Wide Mouth
18			Cans Quart	Paint with Lid	68				
19			Cans 1 Gal.	Paint with Lid	69			Jug 1 Gal.	Plastic Bleach with Lid
20			Cans 1/2 Gal.	Paint with Lid	70			Jug 1/2 Gal.	Plastic Bleach with Lid
21			Cans 1 oz.	Seamless with Lid	71			Liquid Wrench	137006100
22			Cans 3 oz.	Seamless with Lid	72			Pan # 12	12" Brass
23			Cans 8 oz.	Seamless with Lid	73			Pan # 8	8" Brass
24			Cloth Sample Bag	137000200	74			Pan Cover # 12	12" Brass
25			Conc. Cyl. Mold 4x8	Pastic Case Only	75			Pan Cover # 8	8" Brass
26			Concrete Rub Stone	8'x3~/24	76			Protective Cream	133004132
27			Concrete Wood Float	Double Edge	77			Protective Cream Glove	133008100
28			Container Trico 5 Gal	155012280	78			Recorder Chart	Cat. #1006
29					79				
30					80			Safety Hats White	135001650
31					81			Safety Hats Blue	135001620
32					82				
33	***ALL FORMS 5 PACKAGES MAXIMUM ISSUED*****				83			Scoop #001	Small
34					84			Scoop #002	Medium
35			Form MT-250	Daily Report Concrete	85			Scoop #003	Large
36			Form MT-251	Mat. Received 61-03454	86			Sieve # 4	08" Brass
37			Form MT-252A	Mat. Insp. Biweekly Agg.	87			Sieve # 4	12" Brass
38			Form MT 253L	Record of Beams Tested	88			Sieve #005	08" Brass
39			Form MT 253P	Plant Inspector's Report	89			Sieve #006	08" Brass
40			Form 253R	Roadway Inspector's Rept.	90			Sieve # 8	08" Brass
41					91			Sieve # 8	12" Brass
42			Form MT-255	Report ot Material Transfer	92			Sieve # 10	08" Brass
43			Form MT-301	Concrete Comp. Test Report	93			Sieve # 10	12" Brass
44			Form MT-313	Mat Cert. - Cement Cert.	94			Sieve #014	08" Brass
45			Form MT-504	Fld. AASHTO Den Determ.	95			Sieve #014	12" Brass
46			Form MT-506	Moist. Den. Determination	96			Sieve # 16	08" Brass
47			Form MT-507	Proof Rolling Report	97			Sieve # 16	12" Brass
48			Form MT-514N	Control Strip Density	98			Sieve # 20	08" Brass
49			Form MT-515N	Test Section	99			Sieve # 30	08" Brass
50			Form MT-605	Btmus Roadway Insp.	100			Sieve # 40	08" Brass

G:/Everyone. . /MT Forms/Supply Room/Requisition For Supplies 1-18-2005

(over)

M&T-100 (Reverse)

Order highlighted items from Inventory Control (this does not apply to M&T)

	QUANTITY			
	ORDERED	SHIPPED		
101			Sieve # 40	12" Brass
102			Sieve # 50	08" Brass
103			Sieve # 60	08" Brass
104			Sieve # 80	08" Brass
105			Sieve # 80	12" Brass
106			Sieve # 100	08" Brass
107			Sieve # 140	08" Brass
108			Sieve # 200	08" Brass
109			Sieve # 200	12" Brass
110			Sieve # 270	08" Brass
111			Sieve # 325	08" Brass
112			Sieve 1-1/2" Opening	12" Brass
113			Sieve 1-1/2" Opening	08" Brass
114			Sieve 1-1/4" Opening	08" Brass
115			Sieve 1/2" Opening	08" Brass
116			Sieve 1/2" Opening	12" Brass
117			Sieve 1/4" Opening	08" Brass
118			Sieve 1" Opening	08" Brass
119			Sieve 1" Opening	12" Brass
120			Sieve 2-1/2" Opening	08" Brass
121			Sieve 2" Opening	12" Brass
122			Sieve 3/4" Opening	08" Brass
123			Sieve 3/4" Opening	12" Brass
124			Sieve 3/8" Opening	08" Brass
125			Sieve 3/8" Opening	12" Brass
126			Sieve 5/8" Opening	08" Brass
127			Silicone Spray	137006250
128			Slump Cone	
129			Soil Pan (Bottom)	Gilson Shaker
130			Suction Gun	130015150
131			Syringe Rubber	Ear and Ulcer
132			Tamping Rod	3/8"
133			Tamping Rod	5/8"
134			Templistics 1100F	1100 Degree F
135			Templistics 125F	125 Degree F
136			Templistics 150F	150 Degree F
137			Templistics 200F	200 Degree F
138			Templistics 225F	225 Degree F
139			Templistics 250F	250 Degree F
140			Templistics 300F	300 Degree F
141			Templistics 500F	500 Degree F
142			Thermometer Asphalt	Small 5# 50 - 500
143			Thermometer Asphalt	50 to 500F Large
144			Thermometer Concrete	1# 25 to 125F
145			Thermometer Dial	Concrete 10to110C Sm MET
146			Thermometer 70C	20 to 70 Deg. C 15-3481
147			Thermometer 101C	1 to 101 Deg. C 15-043B
148			Thermometer 120F	Slieved Pocket Holder
149			Thermometer 220C	0 to 220 Deg. C Asphalt
150			Thermometer Outdoor	Min/Max

	QUANTITY			
	ORDERED	SHIPPED		
151			Ties Wire Plastic	108020910
152			Tool Trowel Brick	130028100
153			Tool Trowel Concrete	130028150
154			Tools Spatula	AE-55-16-371-B 4"
155			Tools Spatula	Fisher Blk. 3" 14-356A
156			Tools Spatula	Fisher Scientific 6"
157			Tools Spatula	Fisher Scientific 12"
158			Tools Spatula	Thomas 5-1/2"
159			Tools Spatula	13-360 3"
160			Tools Spatula	14-360 4"
161			Tools Spatula	8338 M-10 3-1/2"
162			Wash Bottle	Small / 25 ml
163			Wash Bottle	250 ml
164			Wash Bottle	500 ml
165				
166			Hard Hat Blue Wide Brim	135001610
167			Hard Hat White Wide Brim	135001615
168				
169				
170				
171			**Parts for Field Test-Concrete Pavement**	
172			Chase Indicator Kit	
173			70% Isopropyl Alcohol	
174			Slump Cone	
175			Tamping Rod (5/8")	
176			Min-Max Thermometer	
177			Concrete Thermometer	
178			Hicams Card	
179			Beam Specimen Carrying Handle	
180			Rubber Mallot (1.25 lb)	
181			Wood Float #44	
182			Rubbing Stone	
183			#2 Scoop	
184			Cylinder Mold Agent	137006100
185			10" Brick Trowel	130028100
186			8' Stanley Tape	130027250
187			Moisture Equipment Complete Set	
188				
189				
190				
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197				
198				
199				
200				

APPROVED			
By Section Head:		Date:	
Filled By:		Date:	

North Carolina Department of Transportation
Division of Highways-Materials and Tests Unit
SOIL AND STONE DENSITY EQUIPMENT REQUITSITION FORM

48 hour notice required when ordering complete set of density equipment.
Must be submitted in duplicate (2).

Date:		**Courier #:**			
MSC #:		**Telephone #:**			
Fax#:					
From: (Name)		**Division:**			
Street:		**City:**		**Zip Code:**	

Item:	Quantity:
ABC Sampling Ring	
Aluminum Scoop #1	
Butane Tank 5 lbs.	
Density Balloons (Pkg.)	
Electronic Balance	
Forms (504 & 506)	
Frying Pan	
Galvanized 12 Qt. Bucket	
Glass Graduated Cylinders (100 ML)	
Hand Auger 3”	
Hot Plate (Gas)	
Long Handle Sampling Spoon	
Moisture Can (Density)	
Pick	
Procedures	
Proctor Mold 1/30 Cu. Ft.	
Proctor Mold 3/40 Cu. Ft.	
Rammer (5-1/2 Lb.)	
Soil Mold Extractor	
Soil Pan (3” x 12 x 24”)	
Spatula 3 ½” #8338M10	
Steel Straight Edge	
Straight Edge 3’ Wood	
Volumeter Actuator Bulb	
Volumeter Complete	
Volumeter Field Plate	
Volumeter Replacement Cylinder	
Weight 50 Lb. Round	
Weight (50 Lb.) Saddle	
Wooden Mallet	
Complete Density Set	

APPROVED

Resident Engineer:		**Date:**	
Filled By:		**Date:**	

M & T FORM 251

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
MATERIALS AND TESTS UNIT
RALEIGH, NORTH CAROLINA 27607

REPORT OF MATERIAL RECEIVED (EXAMPLE)

Project No. _____ Report No. _____ Date Received _____
County _____ Destination (Town or Siding) _____
Contractor _____

MATERIAL & TYPE, GRADE, OR CLASS	CAR OR TRANSPORT NO.	INSPECTION TAG NO.	OTHER IDENTIFYING INFORMATION	QUANTITY	SHIPPED FROM	PRODUCER OR SUPPLIER	TRANSFERRED FROM PROJECT
Precast Drainage	5002-030197-3;	5002-030197-4;					
Structures, 2'x 3'	5002-030197-5;	5002-030197-6;					
	5002-030197-7;	5002-030197-8;					
	5002-030197-9			7 ea.	Wilson, NC	Tim's Precast	
NOTE: Since piece numbers run consecutively, it is also							
acceptable to record the numbers as follows:	5002-030197-(3-9)						

John C Smith BY I. M. Goode

RESIDENT ENGINEER TECHNICIAN

INSTRUCTIONS: This report must be completed each day any material is received on the project. All material shall be completely identified and the quantity reported must be accurate. Test reports on pre-tested material will be furnished only upon receipt of a material received report. Each test report furnished will carry the material received report number for proper identification.All materials received must be reported except the following: (1) A.B.C. , (2) Ready-Mixed concrete, (3) Materials used in Ready-Mixed concrete, (4) Asphalt Concrete mixtures.
DISTRIBUTION: Original for Resident Engineer's file, one copy to the Materials and Tests Unit, and one copy to Division Engineer.

INSTRUCTIONS FOR ENTERING INFORMATION ON REPORT OF MATERIAL RECEIVED

The instructions listed below refer to the Report of Material Received on the next page. Each number corresponds to a specific field. If you have any questions, please contact the Section Materials Specialist in your area.

1. Enter the contract number.
2. Enter Report of Material Received (MRR) number.
3. Enter the date the material was received.
4. Enter the county the project is in.
5. Destination - where the material is going, project, yard, etc.
6. Enter the primary contractor. You may also enter the sub-contractor if all items are specific to his work.
7. If items listed are used for electrical purposes, state here.
8. List items by material name used in the line codes of the contract. Enter sizes, class, and type.
9. Enter line code number. If an item is incidental to another pay item, (i.e. steel offset blocks are incidental to the pay item steel beam guardrail) list the master line code item.
10. List batch, lot, tag, or heat numbers, if applicable.
11. If :
    - An item is pre-tested and stamped approved for use, indicate so by entering "NCDOT" stamped here.
    - Plastic pipe: state if Schedule 40.
    - Posts/Blocks/Poles: state if Wood, Steel, or Plastic. If Wood, state AWW.
    - Reinforcing Steel: always attach a Certified Mill Test Report and M&T Form 913, to the MRR. The quantity on the Form 913 must match the quantity listed on the MRR. The heat numbers on the Form 913 must match the heat numbers on the Certified Mill Test Report.
    - H-piles: heat numbers must be listed on the MRR. A Certified Mill Test Report must be attached to the MRR and the heat numbers must match.
12. List the quantity. English quantities or Metric quantities.
13. Enter the location where the material is being shipped from (i.e. Lima, OH).
14. Enter the Producer, **not the supplier**, (i.e. Lowes, Silverman, etc. are suppliers). One exception: General Materials is OK to use if material is PVC pipe.
15. If items are being transferred, the project number must be recorded here, where the materials is being transferred from. A test report or certification for the item(s) transferring must be attached.
16. Resident Engineer's signature.
17. Technician's signature.

STATE OF NORTH CAROLINA

DEPARTMENT OF TRANSPORTATION
MATERIALS AND TESTS UNIT
RALEIGH, NORTH CAROLINA 27607

REPORT OF MATERIAL RECEIVED

Project No. _____ Report No. _____ Date Received _____
County _____ Destination (Town or Siding) _____
Contractor _____

MATERIAL & TYPE, GRADE, OR CLASS	CAR OR TRANSPORT NO.	INSPECTION TAG NO.	OTHER IDENTIFYING INFORMATION	QUANTITY	SHIPPED FROM	PRODUCER OR SUPPLIER	TRANSFERRED FROM PROJECT

_____ **BY** _____
RESIDENT ENGINEER TECHNICIAN

INSTRUCTIONS: This report must be completed each day any material is received on the project. All material shall be completely identified and the quantity reported must be accurate. Test reports on pre-tested material will be furnished only upon receipt of a material received report. Each test report furnished will carry the material received report number for proper identification. All materials received must be reported except the following: (1) A.B.C. , (2) Ready-Mixed concrete, (3) Materials used in Ready-Mixed concrete, (4) Asphalt Concrete mixtures. DISTRIBUTION: Original for Resident Engineer's file, one copy to the Materials and Tests Unit, and one copy to Division Engineer

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
MATERIALS AND TESTS UNIT
RALEIGH, NORTH CAROLINA 27607

REPORT OF MATERIAL RECEIVED

Project No. C123456 Report No. 36 Date Received 6/7/97
County Mitchell Destination (Town or Siding) Project
Contractor Taylor and Murphy

MATERIAL & TYPE, GRADE, OR CLASS	CAR OR TRANSPORT NO.	INSPECTION TAG NO.	OTHER IDENTIFYING INFORMATION	QUANTITY	SHIPPED FROM	PRODUCER OR SUPPLIER	TRANSFERRED FROM PROJECT
6"x8"x6' Wood Guardrail Posts	Incidental to LC 54		AWW Stamped	150 EA	Gold Hill, NC	Gold Hill Wood Company	
6"x8"x14" Wood Guardrail Blocks	Incidental to LC 54		AWW Stamped	150 EA	Gold Hill, NC	Gold Hill Wood Company	
6" Shoulder Drain Pipe	LC 67	649208	Plastic	2,750 LF	Mebane, NC	Hancor, Inc	
12"x53" Coated H-Piles	LC 90	Stamped NCDOT Approved		240 LF	Colfax, NC	Nucor-Yamato Steel	
Epoxy Coated Reinforcing Steel	Incidental to LC 162	M&T ER02-Release #110802		3,204 LBS	Pittsburg, PA	Ameristeel	
4" Wood Fence Posts, Round	LC 90		AWW Stamped	10 EA	Greensboro, NC	Taylor-Ramsey Co	
35' Wood Poles	LC 184		AWW Stamped	12 EA	Greensboro, NC	Taylor-Ramsey Co	
Grates and Frames	LC 82	CI5-06152006	Foundry QA/QC Stamped	3 EA	Wilmington, NC	Southern Foundry	
18" RC Pipe	LC 36	NCDOT Stamped	3/18/97, 3/19/97	368 LF	Catawba, NC	Smith Setzer & Sons	6.319003T
12" Plastic Pipe	LC 102	59823	Sch 40	450 LF	Garner, NC	General Materials	
Steel Beam Guardrail	LC 123	On approved List Needs field test		1,450 LF	Indian Trail, NC	Trinity Industries, Lima, Ohio	

John Doe BY A. Smith
RESIDENT ENGINEER TECHNICIAN

INSTRUCTIONS: This report must be completed each day any material is received on the project. All material shall be completely identified and the quantity reported must be accurate. Test reports on pre-tested material will be furnished only upon receipt of a material received report. Each test report furnished will carry the material received report number for proper identification. All materials received must be reported except the following: (1) A.B.C. , (2) Ready-Mixed concrete, (3) Materials used in Ready-Mixed concrete, (4) Asphalt Concrete mixtures. DISTRIBUTION: Original for Resident Engineer's file, one copy to the Materials and Tests Unit, and one copy to Division Engineer.